Table. High Priority Implementation Steps, 1994–1996

Goal I: Surveillance

- Establish four population-based Emerging Infections Prevention and Research Centers that will target special populations for inclusion in focused surveillance, applied research, and epidemiology/prevention projects with initial emphasis on foodborne and waterborne infectious diseases.
- Establish two physician-based Sentinel Surveillance Networks to complement other surveillance methods for detecting and monitoring emerging infections such as unexplained adult respiratory distress syndrome (ARDS), meningoencephalitis of unknown etiology, and multidrug-resistant pneumococcal disease.
- Strengthen and link four existing sites for a global consortium of closely linked research centers to promote the detection, monitoring, and investigation of infections emerging internationally and potentially affecting the health of Americans.

Goal II: Research

- Reestablish a CDC extramural applied research program that will enhance public health partnerships between CDC and academic centers by providing support for emerging infectious disease research that emphasizes risk factor analysis, laboratory diagnosis, and prevention effectiveness.

Goal III: Prevention and Control

- Develop additional means to disseminate laboratory and public health information to inform health professionals about the prevention and control of emerging infections and antimicrobial drug-resistance.

Goal IV: Infrastructure

- Reestablish a CDC program for state-of-the-art training in diagnostic evaluation and testing for infectious diseases to provide hospital laboratory personnel at public health and academic medical centers with skills to support the diagnosis and surveillance of emerging infections.
- Establish a public health laboratory fellowship in infectious diseases, analogous to the Epidemic Intelligence Service for training in epidemiology, that will train medical microbiologists in CDC's approaches to diagnosis, molecular epidemiology, and research

emphasize the necessity of expeditiously implementing this plan through a balanced intramural and extramural effort.

The goals and activities in this plan are consistent with the goals set forth in recently proposed plans for health care reform. Examples of issues in infectious disease emergence that are particularly relevant to these plans include prolonged hospitalizations caused by hospital-acquired infections; increased morbidity and treatment costs resulting from antimicrobial resistance; and excessive burdens placed on public and private health care delivery facilities due to community-wide outbreaks of foodborne and waterborne infections.

Some of the activities listed in this document are already in the planning stages and will be implemented soon. Most will require additional funds and personnel. Specific details of many of the proposed activities need further development in full cooperation with other federal agencies, state and local health authorities, academic institutions, professional societies, and others. With this document as a guide and a first step, implementation will be based on public health needs and resource availability. This process will be approached in stages, as a longterm endeavor with sustainable impact (Table).

The vision and strategy of this plan are based upon repeated experience demonstrating that it is far less costly, in terms of both human suffering and economics, to anticipate and prevent infectious disease threats than to react with expensive treatment or containment measures to public health crises. Even with implementation of this plan there are no guarantees that a microorganism cannot cause disaster. However, investments in surveillance, laboratory research and training, epidemiologic investigations, and integration with prevention and control efforts will ensure that we are better prepared to respond to emerging infectious disease threats and to lessen their impact. It is crucial that emerging infectious disease threats be addressed and that the basic tenets of prevention-oriented public health policy form an integral component of our nation's efforts to ensure health in our communities.

"Ingenuity, knowledge, and organization alter but cannot cancel humanity's vulnerability to invasion by parasitic forms of life. Infectious disease which antedated the emergence of humankind will last as long as humanity itself, and will surely remain, as it has been hitherto, one of the fundamental parameters and determinants of human history."

— William H. McNeil in Plagues and Peoples, 1976